

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and the following commentary.

I. Status of the Claims

Claims 1-15 were previously cancelled. Claims 22-24 are canceled without prejudice or disclaimer. Claims 16-18 have been amended to delete the recitation of "wild type." Because no new matter is introduced by way of this amendment, Applicants respectfully request entry of the same. Upon entry, claims 16-21 and 25-29 will be pending.

II. Claim Objections

The Examiner objected to claims 22-24 for allegedly "failing to further limit the subject matter" of the base claim. Without acquiescing to the stated basis for objection, claims 22-24 have been cancelled, thereby rendering the issue moot.

III. Rejection of Claims under 35 U.S.C. § 112, second paragraph

The Examiner rejected claim 16 for alleged indefiniteness due to its recitation of "wild type." Without acquiescing to the stated basis for the rejection, claim 16 has been amended to delete the term.

The Examiner rejected claim 24 for alleged indefiniteness "because a promoter is not targeted to a cell." Without acquiescing to the stated rational of rejection, claim 24 has been cancelled, thereby rendering the rejection moot.

Accordingly, Applicants respectfully request withdrawal of the rejections.

IV. Rejection of Claims under 35 U.S.C. § 102(b)

The Examiner rejected claims 16-18, 22-24 and 29 for alleged anticipation by Chou *et al.*, *Science* 250: 1262-66 (1990). Applicants respectfully traverse the rejection.

The Examiner contends that Chou discloses an HSV with mutated $\gamma_134.5$ gene and that the prior-art virus contains an insert of a 16-amino acid epitope, which meets the recitation of claim 16, an “expressible non-herpes simplex virus nucleotide sequence encoding a desired protein.” Chou makes reference to another publication by Hubenthal-Voss *et al.*, *J. of Virology* 62: 454-62 (1988), appended as Exhibit A, which describes the peptide epitope in question. *See* Chou at page 1264, right column, lines 27-32.

Hubenthal-Voss states that a 15-amino acid peptide comprises the sequence of the N-terminal domain of ICP4 (page 456, right column, lines 6-9), which is a herpes simplex virus protein. In the C-terminus, Chou’s peptide is one amino acid longer than Hubenthal-Voss’, due to the introduction of a restriction endonuclease site during cloning.

Nevertheless, one skilled in the art would have appreciated that Chou’s peptide comprises the sequence of the HSV protein, ICP4. By contrast, the claimed invention relates to a herpes simplex virus with a genome that comprises an expressible *non-herpes simplex virus* nucleotide sequence encoding a desired protein and an alteration in the $\gamma_134.5$ gene. Moreover, Chou’s virus with the 16-amino acid insert is “moderately virulent” (abstract, lines 10-11), while the virus of Applicants’ invention, by virtue of the recited “alteration in the $\gamma_134.5$ gene,” is “not neuro-virulent.” *See* specification at page 1, line 8.

Thus, the prior-art HSV does not embody each and every aspect of the presently claim invention. Withdrawal of the rejection under section 102(b) is warranted, therefore.

V. Provisional Double Patenting Rejection

The Examiner provisionally rejected claims 16-29 on the grounds of nonstatutory obviousness-type double patenting over claims 7-18 of co-pending application serial No. 10/748,233 and over claims 35-39, 43-46 of co-pending application serial No. 11/097,391, respectively.

Because these rejections are provisional, Applicants choose to defer any action until an actual double-patenting rejection is made, or until there is indication of allowable claims in the present application.

CONCLUSION

Applicants believe that the present application is in condition for allowance. Favorable reconsideration is respectfully requested. Examiner Shen is invited to contact the undersigned directly, should he feel that any issue warrants further consideration.

The Commissioner is authorized to charge any additional fees, which may be required under 37 CFR §§ 1.16-1.17, and credit any overpayment to Deposit Account No. 19-0741. Should no proper payment accompany this response, then the Commissioner is authorized to charge the unpaid amount to the same deposit account. If any extension is needed for timely acceptance of submitted papers, then Applicants petition for such extension under 37 CFR § 1.136 and authorize payment of the relevant extensions fee(s) from the deposit account.

Respectfully submitted,

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